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10/686,205	10/15/2003	Nancy Cam Winget	72255/00008	5890
23380 TUCKED ELL	7590 08/29/2007 IS & WEST LLP		EXAMINER	
TUCKER ELLIS & WEST LLP 1150 HUNTINGTON BUILDING			CHEN, SHIN HON	
925 EUCLID A	AVENUE , OH 44115-1414		ART UNIT PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

· · · · ·		Application No. Applicant(s)	
Office Action Summary		10/686,205	WINGET, NANCY CAM
		Examiner	Art Unit
		Shin-Hon Chen	2131
Period fo	The MAILING DATE of this communication app	ears on the cover sheet with	the correspondence address
A SHO WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DASSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICA 36(a). In no event, however, may a rep vill apply and will expire SIX (6) MONTH, cause the application to become ABAR	ATION.  lly be timely filed  IS from the mailing date of this communication.  NDONED (35 U.S.C. § 133).
Status			
1)⊠ 2a)⊠	Responsive to communication(s) filed on <u>25 Ju</u> This action is <b>FINAL</b> . 2b) This Since this application is in condition for allowar closed in accordance with the practice under <i>E</i>	action is non-final.  nce except for formal matter	•
Dispositi	on of Claims		
5)□ 6)⊠ 7)□	Claim(s) 1-5,7-9,11 and 13-18 is/are pending ir 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed.  Claim(s) 1-5,7-9,11 and 13-18 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or	vn from consideration.	
Applicati	on Papers		
10)⊠	The specification is objected to by the Examiner The drawing(s) filed on 15 October 2003 is/are: Applicant may not request that any objection to the o Replacement drawing sheet(s) including the correcti The oath or declaration is objected to by the Ex	a) $\boxtimes$ accepted or b) $\square$ objection of the drawing (s) be held in abeyance ion is required if the drawing (s)	e. See 37 CFR 1.85(a). ) is objected to. See 37 CFR 1.121(d).
Priority u	ınder 35 U.S.C. § 119	,	
a)[	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the prior  application from the International Bureau see the attached detailed Office action for a list of	s have been received. s have been received in Apprity documents have been re u (PCT Rule 17.2(a)).	plication Noeceived in this National Stage
2) U Notic 3) U Inforr	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	Paper No(s)/I	mmary (PTO-413) Mail Date ormal Patent Application

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#### DETAILED ACTION

1. Claims 1-5, 7-9, 11 and 13-18 have been examined.

## Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 16-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 16-18 discloses an article of manufacture embodied in a computer readable medium, wherein the computer readable medium includes carrier wave/pulse (Specification: page 6 line 15). MPEP 2106.01 REV. 5.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-4, 7-9, 11 and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotani in view of Aerrabotu et al. U.S. Pub. No. 20040203598 (hereinafter Aerrabotu) and further in view of Edasawa et al. U.S. Pub. No. 20030005293 (hereinafter Edasawa)..

5. As per claim 1, 11 and 16, Kotani discloses a method for validating an electronic transmission, the method comprising the steps of: generating a group key for encrypting and signing an electronic message transmitted on a network (Kotani: [0053]: group key is used); establishing a group key name corresponding to the group key for encrypting and signing the electronic message transmitted to a group of clients on the network (Kotani: [0054]: the common key is prepared in both sides); transmitting a data packet, the data packet including the group key name (Kotani: [0057]: the identification code corresponds to group key is added to the header), the electronic message and group key name (Kotani: [0054]: the common key is prepared in both sides; [0057]: identification code for the group keys); receiving the data packet; validating the group key name in the received data packet (Kotani: [0104]: validate group ID); the step of validating further includes the step of comparing the received group key name to a group key name table (Kotani: [0106]: select the group key by the ID; figure 2: key portion).

Kotani does not explicitly disclose the data packet includes signature to authenticate the electronic message. However, Aerrabotu discloses transmitting a message from server to client that includes signature in the header portion to validate the trustworthiness of transmitting side (Aerrabotu: [0027]: the header includes signature data field). It would have been obvious to one having ordinary skill in the art to include signature in the header portion of a data packet because both prior art discloses method of communicating data that contains message and header in distributed network environment. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Aerrabotu within

the system of Kotani because embedding signature within the header portion of a message allows a device to validate source of the message (Aerrabotu: [0027]).

Kotani as modified does not explicitly disclose the step of discarding the received multicast message if the received group key name does not match an entry in the group key name table. However, Edasawa discloses discarding message if group ID does not match (Edasawa: [0297]: discard message if group ID do not match). It would have been obvious to one having ordinary skill in the art to discard received message if the group ID do not match because both the messages are directed toward multicast using group keys. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Edsawa within the combination of Kotani-Aerrabotu because it avoids redundant processing of unintended message.

- 6. As per claim 2, Kotani as modified discloses the method of claim 1. Kotani further discloses the method comprises the step of adding the group key name and the message authentication signature to a packet name extension prior to the step of transmitting (Kotani: [0057]: identification code correspond to group key is added to the header; Aerrabotu: [0027]: signature is embedded in the header). Same rationale applies here as above in rejecting claim 1.
- 7. As per claim 3, Kotani as modified discloses the method of claims 1. Kotani as modified further discloses wherein the step of transmitting includes transmitting any suitable communication network includes but not limited to wireless network in accordance with 802.11 protocol (Kotani: [0046]: applies to any communication network). It would have been obvious

to use 802.11 communication protocol because 802.11 is standard protocol for wireless network. Therefore, it would have been obvious to one having ordinary skill in the art to use 802.11 protocol because standards are extremely important in the computer industry because they allow the combination of products from different manufacturers to create a customized system.

- 8. As per claim 4, Kotani as modified discloses the method of claim 1. Kotani as modified further discloses the method comprises the step of establishing an authenticated relationship (Kotani: [0116]: common key is prepared in both the transmission side and reception side).
- 9. As per claim 7, Kotani as modified discloses the method of claim 6. Kotani as modified further discloses the steps of: establishing a local group key name; and storing the locally established group key name in the group key name table (Kotani: [0018] and [0106] and figure 2: plurality of keys were stored locally that corresponds to identification codes).
- 10. As per claim 8, Kotani as modified discloses the method of claim 1. Kotani further discloses the step of encrypting the multicast message prior to transmission (Kotani: [0057]: the body is encrypted and decrypted by group key).
- 11. As per claim 9, Kotani as modified discloses the method of claim 1. Kotani as modified further discloses the step of decrypting the received multicast message if the received group key name matches an entry in the group key name table (Kotani: [0106]: select the group key according to the group ID).

- As per claim 13, 14, and 17, Kotani as modified discloses the system of claims 11 and 16. Kotani as modified further discloses wherein the step of transmitting includes transmitting any suitable communication network includes but not limited to wireless network (Kotani: [0046]: applies to any communication network including wireless network). It would have been obvious to use 802.11 communication protocol because 802.11 is standard protocol for wireless network. Therefore, it would have been obvious to one having ordinary skill in the art to use 802.11 protocol because standards are extremely important in the computer industry because they allow the combination of products from different manufacturers to create a customized system.
- 13. As per claim 15, Kotani as modified discloses the system of claim 11. Kotani further discloses wherein the group key name is a unique identifying element (Kotani: [0087]: only the communication terminals of the same group can communicate).
- 14. As per claim 18, Kotani as modified discloses the article of claim 16. Kotani further discloses wherein the message receiving logic further includes means for causing a processing system to compare a received group key name with a local key name table (Kotani: [0109] and figure 2).
- 15. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kotani in view of Aerrabotu and further in of Edasawa and further in view of Kang et al. U.S. Pub. No. 20040073796 (hereinafter Kang).

16. As per claim 5, Kotani as modified discloses the method of claim 4. Kotani as modified does not explicitly discloses wherein the step of establishing an authenticated relationship employs a handshake protocol. However, Kang discloses the handshake protocol for establishing user authentication and exchange of keys (Kang: [0007]). It would have been obvious to one having ordinary skill in the art to apply the handshake protocol to establish keys in both the transmission side and receiving side (Kotani: [0054]: keys are prepared for both sides) because handshake protocol is well known for key exchange in communication networks. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Kang within the combination of Kotani-Aerrabotu because handshake protocol defines a state machine about wireless LAN user authentication and exchange of an encryption key to be used in a wireless network (Kang: [0007]).

### Response to Arguments

17. Applicant's arguments filed 6/25/07 have been fully considered but they are not persuasive.

Regarding applicant's remarks, applicant disagrees with the 101 rejection stating that the functional descriptive material recorded on some computer-readable medium including carrier wave is patentable. However, such signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.

On the other hand, applicant argues that the prior art of record does not discloses discarding message when the group ID does not match. However, Edasawa discloses that

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limitation as specified in prior office action (Edasawa: [0297]: discard message if group ID do not match). Therefore, applicant's argument is traversed.

#### Conclusion

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shin-Hon Chen whose telephone number is (571) 272-3789. The examiner can normally be reached on Monday through Friday 8:30am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shin-Hon Chen Examiner Art Unit 2131

SC

AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100